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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/438,759	11/11/1999	GISELA MEIER	2368/098	9841

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EXAMINER

LAM, ANN Y

ART UNIT

PAPER NUMBER

1641

DATE MAILED: 08/13/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/438,759

Applicant(s)

MEIER ET AL.

Examiner

Ann Y. Lam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 12, 15-17, 19-22 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Wojciechowicz, 5,730,742.

As to claims 12 and 26, Wojciechowicz discloses an electrically conductive rigid hollow tube (22) formed by a steel tube (see column 6, lines 21-22) with a sharp tip (204) with an exit opening dimensioned for passage of a catheter, see Figure 1B, a body part (14) including an inlet opening axially aligned with the cannula tube, see column 5, lines 17-23, a connector (12) electrically connected to the cannula in the area of the body part, wherein said cannula tube has an electrically insulating outer covering (18) of the cannula tube which extends from the body part out to the tip and which leaves the tip exposed at least in its distal end area, see for example Figure 7B, and wherein said electrical connector (12) extends through the body part to the outer surface of the cannula tube, see Figure 1B.

As to claim 15, the proximal end of the cannula tube is provided co-axially in the body part, wherein a ring gap (i.e., a portion of 14) is formed between the proximal end

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of the cannula tube and the thereto connected electrically contacting connector and an inner wall of the body part, and wherein said ring gap is filled with plastic, see column 5, lines 18-26.

As to claim 16, the inlet of the body part decreases in diameter to form an inlet funnel oriented co-axially towards the proximal end of the cannula tube, see Figure 7B.

As to claim 17, the proximal end of the body part has a luer-lock connection (24).

As to claims 19 and 24, the distal tip is a facet cut, see Figure 7B.

As to claim 20, the facet cut is angled at an angle of approximately 45 degrees to the axis of the cannula tube, see Figure 7B.

As to claim 21, the distal tip is formed as a closed conically arched tip with an exit opening, see Figure 8A.

As to claim 22, a ramp (104) is formed on the inside of the distal end of the cannula tube.

As to claim 25, said cannula tube tip is considered to be a Sprout tip.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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2. Claims 13, 14, are rejected under 35 U.S.C. 103(a) as being unpatentable over Wojciechowicz, in view of Mower et al., 4,765,341.

Wojciechowicz discloses the invention substantially as claimed (see above), except for an electrical contact pressed against the cannula tube, to which contact a wire of a multi-strand connector is soldered.

However, Mower et al. disclose a medical device having an electrode and an electrical contact connected to a wire of a multi-strand connector. Mower et al. teach that the multi-strand connector provides flexibility and has an exceedingly long life in the face of mechanical stress, see column 5, lines 45-56. It would have been obvious to provide a multi-strand connector as taught by Mower et al. as the connector in the Wojciechowicz device in order to provide for flexibility and to endure mechanical stress which is desirable for lasting use as taught by Mower et al.

3. Claims 18 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wojciechowicz.

Wojciechowicz discloses the invention substantially as claimed (see above), except for the electrically exposed end area of the distal tip of the cannula tube having a length of maximally 1mm.

However, it would have been obvious matter of design choice to provide for an electrically exposed end area of the distal tip having a length of maximally 1mm since applicant has not disclosed that the claimed tip lengths solve any stated problem or is

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for any particular purpose and it appears that a tip of a different length would perform the disclosed functions equally well.

Additionally, it would have been obvious to provide for a distal tip length as claimed, as would be desirable for treatment of a particular sized body part, for example small blood vessels, see column 2, lines 27-29.

4. Claims 12, 16, 21, 22 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoon, 5,665,096.

Yoon discloses the invention substantially as claimed. Yoon discloses a rigid, hollow, unipolar cannula (62), see column 5, lines 30-35, having a sharp tip, a body part (48), an electrical connector, see column 5, lines 30-35, and an electrically insulated outer covering, see column 5, lines 35-39, as claimed by Applicant. More specifically, as to claim 21, the cannula tube is formed as a closed conically arched tip with an exit opening provided along the side of the cannula tube proximally behind the tip, see Figure 1.

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However, Yoon does not disclose that the cannula is formed from steel. However, Wojciechowicz discloses a conductive cannula formed from steel, see column 6, lines 21-22. It would have been obvious to form the Yoon conductive cannula from steel as a known conductive material, as taught by Wojciechowicz.

Response to Arguments

Applicant's arguments with respect to the above claims have been considered but are moot in view of the new ground(s) of rejection. Examiner would like to point out that the Wojciechowicz and Yoon cannula are unipolar and are rigid and have a sharp tip.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Moorman et al., 6,306,132, and Loeb et al., 6,286,512, both disclose a conductive cannula having a sharp tip and insulated covering. Witt, 4,842,585, discloses a steel cannula having a sharp tip with a side opening.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ann Y. Lam whose telephone number is (703) 306-5560. The examiner can normally be reached on M-Sat 11-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long V. Le can be reached on (703)305-3399. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-4242 for regular communications and (703)308-4426 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0196.

A.L. 
August 8, 2003


CHRISTOPHER L. CHIN
PRIMARY EXAMINER
GROUP 1800/641